

You are **strongly** encouraged to work in groups, following the procedure as in homework [MS09](#).

Exercise pCA 3. Describe (in words or/and a picture) the sets whose points satisfy the following relations. Which of these sets are regions? By definition, a region is an open connected set; you can argue openness and connectedness intuitively (so no ε 's needed).

ER 3.a. $|z + i| \leq 1$.

ER 3.b. $\left| \frac{z - 1}{z + 1} \right| = 1$.

ER 3.c. $|z - 3| > |z - 2|$.

ER 3.d. $\frac{1}{z} = \bar{z}$.